IT IS THE VENDOR'S RESPONSIBILITY TO CHECK FOR ADDENDUMS PRIOR TO SUBMITTING PROPOSALS

NOTICE TO BIDDERS SPECIFICATION NO. 03-083

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

Concrete Compression Testing Machine

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon Wednesday, March 19, 2003 in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above.

PROPOSAL SPECIFICATION NO. 03-083 BID OPENING TIME: 12:00 NOON

DATE: Wednesday, March 19, 2003

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

the contract documents at and for fees listed below.	
ADDENDA RECEIPT: The receipt of addenda to the specification numbers through are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.	
each Concrete Compression Testing Manufacturer Mo	
	epresents and warrants that he has full and o the City, and to enter into a contract if this
	OPOSAL AND SUPPORTING MATERIAL. PE: SEALED BID FOR SPEC. 03-083
COMPANY NAME	BY (Signature)
STREET ADDRESS or P.O. BOX	(Print Name)
CITY, STATE ZIP CODE	(Title)
TELEPHONE No. FAX No.	(Date)
EMPLOYER'S FEDERAL I.D. NO. OR SOCIAL SECURITY NUMBER	ESTIMATED DELIVERY DAYS
E-MAIL ADDRESS	TERMS OF PAYMENT

BIDS MAY BE INSPECTED IN THE PURCHASING DIVISION OFFICES DURING NORMAL BUSINESS HOURS, <u>AFTER</u> TABULATION BY THE PURCHASING AGENT. IF YOU DESIRE A COPY OF THE BID TABULATION TO BE MAILED TO YOU, YOU MUST ENCLOSE A <u>SELF-ADDRESSED STAMPED ENVELOPE</u> WITH YOUR BIDDING DOCUMENTS.

SPECIFICATIONS FOR CONCRETE COMPRESSION TESTING MACHINE AND ACCESSORIES

1. GENERAL

- 1.1 This specification is for a 400,000 lbs. capacity compression machine for testing concrete specimens.
- 1.2 Unit must meet ASTM C-39 and E-4 specifications.
- 1.3 Unit must come with an operation manual and parts list.
- 1.4 Unit must come with a 2-year warranty from date of acceptance.

2. PHYSICAL REQUIREMENTS

- 2.1 The machine must be of a dual unit design, incorporating a rigid load frame with a heavy duty mounting stand and a separate, freestanding control console.
- 2.2 The heavy duty mounting stand must support the load frame such that the machine's lower platen is positioned approximately 39 in. above floor level.
- 2.3 The load frame must be constructed of structural steel side members welded to solid steel crossheads and must exceed the frame stiffness requirements of ACI-363.
- 2.6 The load frame must have a 1.5 in. thick by 6.5 in. diameter spherically seated steel upper compression platen hardened to a Rockwell hardness of 55C or better and be precision ground to maintain a planeness within 0.0005 in. in any 6 in. of direction. The surface of the platen must be scribed with concentric circles for specimen centering and must be electroplated with industrial hardened nickel for wear and rust resistance. The platen must have a load capacity of 650,000 lbs. and conform to ASTM C-39.
- 2.7 The load frame must have a 2 in. thick by 12 in. wide by 18 in. deep steel lower compression platen hardened to a Rockwell hardness of 55C or greater. The surface of the platen must be scribed with concentric circles for specimen centering and must be electroplated with industrial hardened nickel for wear and rust resistance. The lower platen must be directly mounted to the top of the power piston and must have a debris shroud to prevent foreign material from entering the piston and cylinder assembly.
- 2.8 The load frame must have a lifting ring installed and must have a vertical daylight opening of at least 18 3/8 in. and a horizontal opening of at least 13 1/4 in. without the spherical seated upper platen installed in the machine.
- 2.9 The load frame must be supplied with front and rear steel safety guard doors.
- 2.10 The control console must house a digital load indicating system and hydraulic and electrical systems.
- 2.11 The surface of the control panel that houses the digital system must be set at a 30 degree angle for operator line-of-sight convenience. The hydraulic flow control valve must be mounted directly to the panel below the digital system and approximately 39 in. above the floor.
- 2.12 The control console must be painted inside and out for long term durability.

3. HYDRAULIC PUMPING AND CONTROL SYSTEM

- 3.1 Testing pressure must be supplied by a steel power piston with a minimum diameter of 8 in., a stability length of 5 in., and a working stroke of 2 ½". The piston must be precision ground and polished and mounted in a polished solid steel cylinder with a non-frictional "O" ring and teflon back-up ring sealing system.
- 3.2 Hydraulic pressure must be supplied to the piston by a two-stage pump. The pump must have a supercharged first stage that provides low-pressure, high-volume delivery for rapid advance of the piston. Once system pressure exceeds 125 p.s.i., stage two must automatically take over to deliver high-pressure, low-volume flow to full machine capacity. The pump must be directly connected to the electric motor shaft and run immersed in hydraulic oil.

- 3.3 The hydraulic control system must consist of a single automatic control valve with multiple loading and unloading functions described as follows:
 - 3.3.1 Metered Advance Function:

Loading is maintained by a pressure compensation valve that maintains a continuous rate of loading. Pressure per minute loading is adjustable from 1,000 to 200,000 pounds per minute or 0 to 0.6 in. per minute travel. At any time during the testing cycle the rate of loading can be adjusted.

3.3.2 Full Advance Function:

The rapid travel lever setting is used to move the compression platen at a rate of 2.5 in. travel per minute to permit the rapid advancement of the piston prior to making contact with, as well as pre-loading of, the specimens.

3.3.3 Hold Function:

Pressure advance can be stopped and held to inspect the alignment of the test specimen or to stop the test cycle.

3.3.4 Retract Function:

This function is for the release of pressure and return of the piston to its start position.

4. <u>DIGITAL LOAD INDICATING SYSTEM</u>

- 4.1 The digital load indicating system must consist of a 20 character alphanumeric display for test monitoring and a keypad for direct data entry.
- 4.2 The digital display must have the capability of displaying load values in engineering units of Lb, kN, N, and Kg, dimensional units of in, mm, or cm, stress values in PSI, MPa, or Kg/cm2, and rate of load control in PSI, MPa, KPa or Lb, units of time in minutes or seconds. All units of measurement shall be user selectable by the operator.
- 4.3 The read out display must be divided into two sections with different test functions being displayed simultaneously and independently of each other on either side of the display. During operation, the right side of the indicator displays the total live load applied to the specimen with peak hold function while the left side of the indicator displays the rate of load being applied to the specimen. Values can be displayed in any of the selectable counting units. At the completion of a test, the rate of load function changes automatically and displays both the total peak stress and load applied during the test in four second intervals until the indicator is manually reset. The system must be able to perform both a self-diagnostic and manual diagnostic check of internal software.
- 4.4 The keypad shall be used for the direct data entry of all engineering units of measurement and test function menu driven prompts. The menu prompts shall require only numeric values to be entered for all test parameters. Menu prompts shall include specimen identification number, test specimen type, specimen dimensions, auto print/store, units of measurement, test report options of statistical summary, specimen age, specimen weight, cylinder cap type, cylinder correction factor, sample break detector settings and supervisor lock out code. Specific keys must include store, zero, print, set-up, enter, main, escape, up & down scroll arrows, decimal point, utility, password protected calibration and 0 through 9 keys.
- 4.5 System must have a cylinder correction factor function which automatically calculates and displays stress test results, if the cylinder's length to diameter ratio is less than 1.8 based on ASTM C-39 specification part 8.2. This feature shall work on all standard size cylinders and concrete cores.
- 4.6 System must have a beam test function to meet ASTM C-78 and C-293 specifications. With this feature, the beam's span, width, and depth dimensions are entered into the digital specimen type program. The stress test results are then displayed as modulus of rupture PSI or metric equivalent.
- 4.7 System shall have a supervisor lock out function which when activated, all test set-up parameters can not be changed in the indicator. However test functions such as specimen identification number, specimen weight, specimen age and cylinder break type can be entered.

- 4.8 System must have the capability to store up to 1000 tests in permanent non-volatile memory in an ASCII delimited format. Test data shall be stored in memory automatically or manually by the operator.
- 4.9 System must have the capability to transfer data to an IBM compatible PC computer or to print to a parallel dot-matrix, bubble-jet, ink-jet, or laser-jet printer.
- 4.10 System must have a password protected menu driven editable calibration program with the capability to store up to six individual load cells or transducer calibration programs. The editing function shall allow the calibrator to re-enter the calibration program and reset an individual load value assigned to a calibration point without affecting the accuracy of any other calibration set point.
- 4.11 System shall have an accuracy of +/- 0.5% of indicated load from 1% of machine capacity to full machine capacity.

ELECTRICAL SYSTEM

5.1 The electrical system shall be 110/120 volt, 50/60 Hz, single phase. The hydraulic pump motor shall be 3/4 horsepower.

6. ACCESSORIES

- 6.1 2 in. Cube Test Set used for testing 2 in. cubes and 3 in. diameter cylinders and cores.
 Set must consist of a spherically seated compression platen and a lower pedestal and must meet ASTM C-109 specifications.
- 6.2 1-6.5 in. diameter by 1 in. thick steel plate with concentric circles for centering cores.
- 6.3 6-6.5 in. diameter by 1 in. thick steel plates to be used as spacers when testing cores.
- 6.4 WinCom. A Windows 95/98 based utility for capturing data received over the RS-232 serial port to automatically display data in Microsoft Access. A 100 ft. cable shall be included.

7. <u>DELIVERY</u>

7.1 Delivery of material must be F.O.B. to 531 Westgate Blvd., Suite 100 Lincoln, Ne.

8. ACCEPTANCE OF MATERIAL

- 8.1 This bid must include calibration by Calser Corp. after delivery and set-up.
- 8.2 The material delivered under this proposal must be new, the latest make or model, of the best quality and the highest grade workmanship.
- 8.3 The equipment and material delivered under this proposal shall remain the property of the bidder until a physical inspection and actual usage of this equipment and material is made and, thereafter is accepted by the City of Lincoln.
- 8.4 The material delivered under this proposal must be fully in accordance with specification documents.

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder'sletterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated of the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:
 - 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
 - 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. EQUAL OPPORTUNITY

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

4. DATA PRIVACY

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

5. BIDDER'S REPRESENTATION

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

6. INDEPENDENT PRICE DETERMINATION

By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

8. ADDENDA

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

9. ANTI-LOBBYING PROVISION

9.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

10. BRAND NAMES

- 10.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 10.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 10.3 Bids for alternate itemsshall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

10.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

11. DEMONSTRATIONS/SAMPLES

- 11.1 Bidders shall demonstrate the exact item(s) proposed within seven(7) calendar days from receipt of such request from the City.
- 11.2 Such demonstration can be at the City delivery location or a surrounding community.
- 11.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 11.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

12. DELIVERY

- 12.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 12.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 12.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

13. WARRANTIES, GUARANTEES AND MAINTENANCE

- 13.1 Copies of the following documents must accompany the bid proposal for all items being bid:
 - 13.1.1 Manufacturer's warranties and/or guarantees.
 - 13.1.2 Bidder's maintenance policies and associated costs.
- 13.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 13.3 Bidder Warrants and represents to the City that all software/firmware/ hardware/equipment /systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
 - 13.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
 - 13.3.2 That all date sorting by the software /firmware/hardware/ equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any software/ firmware/ hardware /equipment /systems to comply with thisSpecification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-

- complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.
- 13.3.3 No Disclaimers: The warranties and representations set forth in this section 13.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

14. ACCEPTANCE OF MATERIAL

- 14.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 14.2 Material delivered under thisproposal shall remain the property of the bidder until:
 - 14.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
 - 14.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 14.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 14.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 14.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

15. BID EVALUATION AND AWARD

- 15.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 15.2 No bid shall be modified or withdrawn for a period of sixty (60) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 15.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 15.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.
- 15.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

16. INDEMNIFICATION

- 16.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 16.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 16.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

17. TERMS OF PAYMENT

17.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

18. LAWS

18.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.